Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A series device of protection against a heating of a parallel protection element of an equipment of a telephone line, including:

a bidirectional cut-off element of normally on state, in series with the parallel protection element;

a temperature detection element adjacent to the parallel protection element; and

a switching element having an input coupled to an output of the detection element and adapted to ~~turning~~ turn off the cut-off element when the temperature of the parallel protective element detected by the detection element exceeds a predetermined threshold.

2. (Original) The device of claim 1, wherein the switching element is a normally-off bidirectional element.

3. (Original) The protection device of claim 1, wherein said cut-off element includes two cut-off thyristors assembled in antiparallel and each having a resistor connected between its anode and cathode gates.

4. (Original) The protection device of claim 3, wherein said switching element includes two control thyristors, respectively a cathode-gate thyristor and an anode-gate thyristor, which are respectively associated with the anode and cathode gates of the cut-off thyristors.

5. (Original) The protection device of claim 4, wherein each control thyristor of the switching element has its gate connected to a midpoint of a resistive dividing bridge having one of its resistive elements formed of a positive coefficient thermistor.

6. (Original) The protection device of claim 4, wherein each control thyristor of the switching element has its gate connected to a midpoint of a resistive dividing bridge via respective series connection of diodes.

7. (Original) The protection device of claim 4, wherein a diode is interposed between the anode-gate control thyristor and the cathode gate of the cut-off thyristor with which it is associated.

8. (Original) The protection device of claim 1, further including a single semiconductor substrate having the bidirectional cut-off element, the temperature detection element, and the switching element integral formed thereon.

9. (Original) The protection device of claim 1, wherein the temperature detection element detects the temperature of the parallel protection element.

10. (Original) The protection device of claim 1, wherein the temperature detection element is integrated in the same semiconductor substrate as the parallel protection element.

11. (Currently Amended) A protection circuit comprising:

a protection element;

a cut-off circuit in a normally on state, in series with a main power to the protection element;

a temperature detection element positioned adjacent to the protection element; and

a normally-off switching element coupled to the temperature detection element to receive a signal when a temperature sensed by the temperature detection circuit is above a threshold value, the switching element being structured to turn on in response to the signal and ~~coupled to~~ output a signal to the cut-off circuit which turns off the cut-off circuit and disconnects the main power from the protection element.

12. (Canceled)

13. (Previously Presented) A series protection device comprising:

a bidirectional cut-off element that is normally in an on state, the bidirectional cut-off element including two cut-off thyristors assembled in antiparallel, each having a resistor connected between its anode and cathode gates;

a protection element in series with the bidirectional cut-off element;

a temperature detection element adjacent to the parallel protection element; and

a switching element adapted to turning off the cut-off element when the temperature of the protection element as detected by the temperature detection element exceeds a predetermined threshold, the switching element including two control thyristors, respectively a cathode-gate thyristor and an anode-gate thyristor which are respectively associated with the anode and cathode-gates of the cut-off thyristors and further including a diode positioned between the anode-gate control thyristor and the cathode-gate of the cut-off thyristor with which it is associated.

14. (New) A protection device for protecting equipment, comprising:

a parallel protection element in parallel with the equipment;

a bidirectional cut-off element of normally on state, coupled to the protection element, and including first and second cut-off thyristors assembled in antiparallel, each of the cut-off thyristors having a control terminal;

a temperature detection element adjacent to the parallel protection element; and

a switching element adapted to turn off the cut-off element when the temperature of the parallel protective element detected by the detection element exceeds a predetermined threshold, wherein the switching element includes first and second control thyristors that are respectively connected between the detection element and the control terminals of the first and second cut-off thyristors.

15. (New) The protection device of claim 14, wherein each control thyristor of the switching element has a control terminal, the detection element includes first and second thermistors connected to each other, and the switching element further includes a first resistor connected at a first intermediate node to the control terminal of the first control thyristor and the first thermistor and a second resistor connected at a second intermediate node to the control terminal of the second control thyristor and the second thermistor.

16. (New) The protection device of claim 14, wherein each control thyristor of the switching element has a control terminal and the detection element includes:

a resistive divider connected between first and second voltages and including first and second intermediate nodes;

a first series connection of diodes connected between the first intermediate node and the control terminal of the first control thyristor; and

a second series connection of diodes connected between the second intermediate node and the control terminal of the second control thyristor.

17. (New) The protection device of claim 14, wherein the switching element further includes a diode interposed between the first control thyristor and the control terminal of the first cut-off thyristor.

18. (New) The protection device of claim 14 wherein the control terminal of the first cut-off thyristor is an anode-gate and the control terminal of the second cut-off thyristor is a cathode-gate.

19. (New) The protection device of claim 14 wherein the cut-off element further includes a first resistor connected between an anode-gate and a cathode-gate of the first cut-off thyristor, and a second resistor connected between an anode-gate and a cathode-gate of the second cut-off thyristor, wherein the control terminal of the first cut-off thyristor is one of the anode- and cathode-gates of the first cut-off thyristor, and the control terminal of the second cut-off thyristor is one of the anode- and cathode-gates of the second cut-off thyristor.

20. (New) The protection device of claim 14 wherein the first control thyristor is a cathode-gate thyristor and the second control thyristor is an anode-gate thyristor.